
स्टिल लुएर पैटर्न ऑर्थोपेडिक
गॉज चिमटी — विशिष्टि
(पहला पुनरीक्षण)

**Stille Luer's Pattern Orthopaedic
Gouge Forceps – Specification**
(*First Revision*)

ICS 11.040.40

© BIS 2023



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002
www.bis.gov.in www.standardsbis.in

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Orthopaedic Instruments, Implants and Accessories Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1972. The first revision of this standard has been brought out to align it with the recent developments and to bring the standard in line with the latest style and format of Indian Standards.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

*Indian Standard***STILLE LUER'S PATTERN ORTHOPAEDIC GOUGE
FORCEPS — SPECIFICATION***(First Revision)***1 SCOPE**

This standard specifies the requirements for gouge forceps (stille luer's pattern) used in orthopaedic surgery.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

<i>IS No.</i>	<i>Title</i>
IS 1570 (Part 5) : 1985	Schedules for wrought steels: Part 5 Stainless and heat-resisting steels (<i>second revision</i>)
IS 7531 : 1990	Surgical instruments — Corrosion resistance of Stainless-steel surgical instruments — Methods of tests (<i>first revision</i>)

3 MATERIAL**3.1 Arms**

The arms shall be made of stainless steel having the following composition:

<i>Sl No.</i>	<i>Constituent</i>	<i>Percent</i>
(1)	(2)	(3)
i)	Carbon	0.35 to 0.45
ii)	Silicon	1.0 <i>Max</i>
iii)	Manganese	1.0 <i>Max</i>
iv)	Chromium	12.5 to 14.5
v)	Nickel	1.0 <i>Max</i>
vi)	Sulphur	0.03 <i>Max</i>
vii)	Phosphorus	0.03 <i>Max</i>

3.2 Springs

The springs shall be of stainless-steel conforming to designation X30Cr13 of IS 1570 (Part 5).

3.3 Screws

The screws shall be of stainless-steel conforming to designation X22Cr13 of IS 1570 (Part 5).

4 SHAPE AND DIMENSIONS

The shape and dimensions shall be as per Fig. 1.

5 WORKMANSHIP

5.1 The forceps shall be free from rough edges, pits, burrs, cracks and blemishes of any kind.

5.2 The cutting edges shall be sharp and uniform.

5.3 When the jaws are closed, the cutting edges shall meet evenly.

5.4 The joints shall have no undue play.

5.5 The spring action shall be smooth. It shall be neither too hard nor too slack.

5.6 The compound action shall be smooth and free from jerks.

6 HEAT TREATMENT

The arms shall be hardened and tempered from 520 HV to 600 HV, the springs from 380 HV to 420 HV and the screws from 290 HV to 320 HV.

7 FINISH

The forceps shall be finished smooth, passivated and polished bright.

8 TESTS**8.1 Performance Test**

Cut a piece of rib of a fully grown goat or sheep five times with the instrument. Each time the instrument shall cut the rib neatly and evenly in one bite without any undue resistance, and cutting edges shall not show any sign of damage.

8.2 Load Closure Test

Apply a compressive force of $15 \text{ N} \pm 2 \text{ N}$ at the ends of the handles. The cutting edges shall meet evenly after the test.

8.3 Corrosion Resistance Test

The forceps shall satisfy the requirements when tested in accordance with IS 7531.

9 MARKING

9.1 The product shall be marked legibly and indelibly with the identification of the source of manufacture; designation of the instrument and letters 'SS' in case of stainless steel to indicate that the instruments are made of stainless steel.

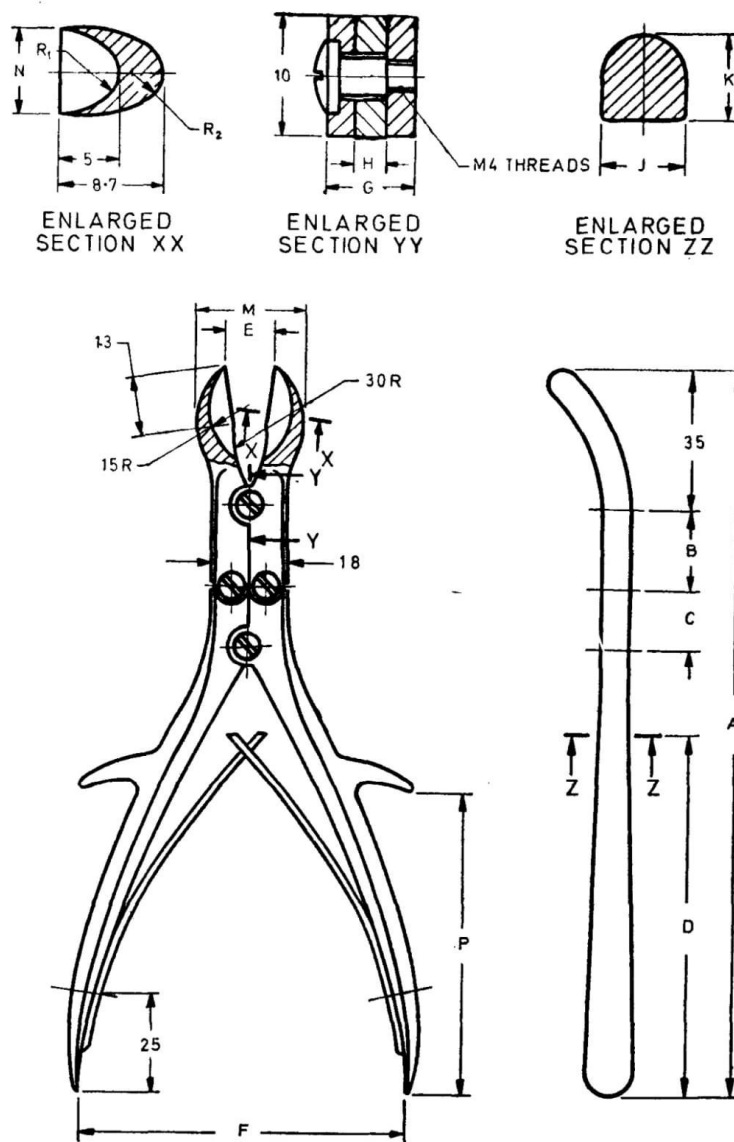
9.2 BIS Certification Marking

The product(s) conforming to the requirements of

this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the product(s) may be marked with the Standard Mark.

10 PACKING

The packing shall be as agreed to between the purchaser and the supplier.



Size	A	B	C	D	E	F	G	H	J	K	M	N	P	R ₁	R ₂
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	± 5			± 2	± 1	± 2	± 0.5		± 0.5	± 0.5	± 1	± 0.5	± 2		
Small	180	20	15	95	12	80	7.0	2.5	7.0	7.0	26.0	7.0	80	2.3	2.5
Medium	225	35	20	105	14	100	12.0	4.5	12.0	10.0	28.0	12.0	90	4.0	4.5

All dimensions in millimeters.

FIG. 1 ORTHOPAEDIC GOUGE FORCEPS (STILLE LUER'S PATTERN)

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 2016* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Head (Publication & Sales), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website- www.bis.gov.in or www.standardsbis.in.

This Indian Standard has been developed from Doc No.: MHD 02 (19677).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

	Telephones
Central : 601/A, Konnectus Tower -1, 6 th Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	{ 2323 7617
Eastern : 8 th Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	{ 2367 0012 2320 9474
Northern : Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113	{ 2254 1442 2254 1216
Western : Plot No. E-9, Road No.-8, MIDC, Andheri (East), Mumbai 400093	{ 2821 8093

Branches : AHMEDABAD. BENGALURU. BHOPAL. BHUBANESHWAR. CHANDIGARH. CHENNAI. COIMBATORE. DEHRADUN. DELHI. FARIDABAD. GHAZIABAD. GUWAHATI. HIMACHAL PRADESH. HUBLI. HYDERABAD. JAIPUR. JAMMU & KASHMIR. JAMSHEDPUR. KOCHI. KOLKATA. LUCKNOW. MADURAI. MUMBAI. NAGPUR. NOIDA. PANIPAT. PATNA. PUNE. RAIPUR. RAJKOT. SURAT. VISAKHAPATNAM.